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EAST LONDON MUSEUM

Notes on Charonia  
Pustulata (Euthyme)  
South Africa's Largest  
Gastropod

The East London Museum has a large number of examples of this species, ranging in size from juvenile to adult. An examination of these shells, and reference to notes made in the field, has produced the information presented in this paper.

The largest example in the museum collection is a dead shell, ex Trawler off Bird Island in 30/40 fathoms, measuring 225 x 125 m.m.

Some years ago, while at Jeffrey's Bay, the writer was shown a larger shell of about 250/300 m.m. in length, with a width in proportion. This specimen had become exposed in a large sand dune, some little distance from the high water mark, through the action of a strong South Easterly wind. It certainly is not a fossil nor a semi fossil shell.

Juvenile shells of *pustulata* are usually smooth until they attain 50/60 m.m. in length, when the nodules begin to appear.

With regard to the colour of shells, available literature states this to be yellowish, or olivaceous brown, with irregular darker brown patches and marks. The present investigation shows that the colours become deeper as one travels eastwards. H.J. Koch (1949) has already recorded this increase in depth of colour for *Patella miniata* Born.

Live and fresh dead shells, varying in colour from yellowish to a deep orange, have been collected at Jeffrey's Bay, also specimens of the more usual brown colour.

Further East from East London to Kei Mouth all specimens seen are of a dark brown, or of deep orange colour. At Bonza Bay a collector, Mrs. M.A. Rix, found a live example of 150 mm. coloured deep orange.

Investigation on the reefs at various localities from East London to Kei Mouth has produced live specimens of 120/125 m.m., which appear to be stunted in growth. These shells are very thick in build and more or less encrusted with barnacles, worm tubes and other marine growths. One specimen taken alive at Haga Haga is very stunted, and its shell is badly corroded by borers.

In the same localities where the stunted shells were found, other live examples were taken - a little larger in size, which appear to be normal. These latter shells are not so heavy in build, and are devoid of sea growths or nearly so. It appears reasonable to assume that stunted shells are those which have lived for a considerable time in rock pools on the reef. Those examples which appear normal may possibly be individuals that have more recently made their way to the reefs from a habitat in deeper water.

Further investigation is now necessary to obtain additional data which may answer the problems confronting the student of Mollusca.

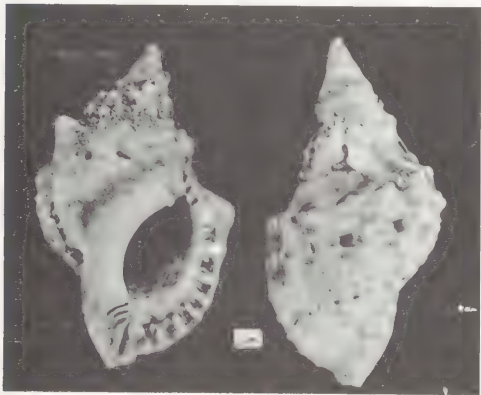


Plate 1  
*Charonia pustulata* Normal specimens  
East London



Plate 2

*Charonia pustulata* Stunted specimen Haga  
Haga, E. L.

### SUMMARY

The maximum size which may be attained by *C. pustulata*, remains to be established.

Live specimens of different sizes, which have orange coloured shells, have been collected. This appears to indicate that the colour is normal within the species, and not the result of beach exposure.

An allied species - *Charonia rubicunda* Perry, in South Australia, also exhibits both the brown and the orange colour.

More investigation into the animals living on the reefs is needed, as their presence may be due to accident, or by design for reasons unknown.

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